

**ABSTRACT**

In an energy storage device comprising a series network of  $n$  storage elements  $C_1, \dots, C_n$ , able to provide a continuous voltage across its terminals, a system for equilibrating the elements is envisaged comprising a plurality of charge transfer modules  $M_{i,j}$ , each module  $M_{i,j}$  ensuring a bidirectional transfer of charge linear to first order between two storage elements  $C_i$  and  $C_j$  of the said network. Each energy storage element is connected to  $p$  modules,  $p \leq n-1$ , each of the  $p$  modules pairing the said element with another element of the network. The time required for reequilibrating is thus reduced.